

REMARKS

In the August 20, 2008 Office Action, the drawings and specification were objected to and claims 1-10 stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the August 20, 2008 Office Action, Applicant has amended the specification, and claims 1, 8 and 9. Also, Applicant has added new claims 11-17 as indicated above. Thus, claims 1-17 are now pending, with claims 1 and 11 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Drawings

In paragraph 2 of the Office Action, the drawings were objected to as failing to comply with 37 CFR §1.84(p)(5). In response, Applicant has amended paragraph [0062] to read "Referring to FIGS. 1 and FIG. 2, the vertical holes (42) of the top housing (16) and the bottom housing (17) illustrated in FIG. 1 are positioned at the right of the blade (23) shown in FIG. 2." The vertical holes (42) are not shown in Figure 2, and thus, the previous version of this paragraph was misleading. In any case, the vertical holes (42) are illustrated and identified in Figure 1. Therefore, Applicant believes that the drawings now comply with 37 CFR §1.84(p)(5) and any confusion from paragraph [0062] has been eliminated. Accordingly, Applicant respectfully requests withdrawal of this objection.

Specification

In paragraph 3 of the Office Action, the specification was objected to for an informality at page 14, line 4. In response, Applicant has amended paragraph [0063] of the specification to correctly refer to the reference number (42) instead of (43). Applicant believes that the specification is now correct. Accordingly, withdrawal of this objection is respectfully requested.

Title

In paragraph 4 of the Office Action, the title of the invention was objected to as being insufficiently descriptive. In response, Applicant has amended the title of the invention as mentioned above. More specifically, the title of the invention has been amended to ROTARY FLUID MACHINE HAVING A PAIR OF ROTATION MECHANISMS AND A PARTITION PLATE DISPOSED BETWEEN THE ROTATION MECHANISMS. Applicant believes that the title is now sufficiently descriptive. Accordingly, withdrawal of this objection is respectfully requested.

Rejections - 35 U.S.C. § 102

In paragraph 5 of the Office Action, claims 1-4 and 9 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 453,641 (Johnson). In response, Applicant has amended independent claim 1 to add the limitations of claim 9 and amended claim 9 to depend from new independent claim 11 as mentioned above.

In particular, independent claim 1 now requires, *inter alia*, a rotary fluid machine having the first rotation mechanism and the second rotation mechanism configured to rotate with a 90° phase difference from each other. Applicant respectfully asserts that this structure is **not** disclosed or suggested by the Johnson patent or any other prior art of record.

Specifically, the Johnson patent discloses two pistons 10 and 10^x and these pistons are arranged in 180° phase difference from each other. In other words, as seen in Figure 2 of the Johnson patent, the right side piston 10 is disposed on the upper side and the left side piston 10^x is disposed on the lower side. Also, as seen in Figure 6 of the Johnson patent, round holes 20 and 20^x of the discs 11 and 11^x are displaced in **180°** phase difference from side to side to each other. Thus, Applicant respectfully asserts that, in the Johnson patent, an *outside* chamber of the **first** rotation mechanism and an *inside* chamber of the **second** rotation mechanism synchronize together and an *inside* chamber of the **first** rotation mechanism and an *outside* chamber of the **second** rotation mechanism synchronize together. As a result, this arrangement causes the greater torque variation. On the other hand, as recited in independent claim 1, the rotary fluid machine of the present application has the first rotation mechanism and the second rotation mechanism configured to rotate with a 90° phase difference from each

other. A 90° phase difference on two rotation mechanisms results in four chambers that operate in 90° phase difference as well and the torque variation is lessened.

It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each element of the claim within the reference. Therefore, Applicant respectfully submits that claim 1, as now amended, is not anticipated by the prior art of record. Accordingly, withdrawal of this rejection of independent claim 1 is respectfully requested.

Moreover, Applicant believes that dependent claims 2-4 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 2-4 are further allowable because they include additional limitations, which in combination with the features set forth in independent claim 1, are not disclosed in the Johnson patent. Accordingly, withdrawal of this rejection of dependent claims 2-4 is respectfully requested.

Rejections - 35 U.S.C. § 103

In paragraphs 6-9 of the Office Action, claims 5-8 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the prior art as follows:

Claim 5 stands rejected as being unpatentable over the Johnson patent in view of U.S. Patent No. 300,628 (Nash);

Claims 6 and 8 stand rejected as being unpatentable over the Johnson patent in view of U.S. Patent No. 4,990,071 (Sugimoto);

Claim 7 stands rejected as being unpatentable over the Johnson patent in view of U.S. Patent Application Publication No. 2003/0194340 (Ni); and

Claim 10 stands rejected as being unpatentable over the Johnson patent in view of Japanese Patent Publication No. 51-23371 (Kamizawa).

In response, Applicant has amended independent claim 1 as mentioned above. In particular, independent claim 1 now requires, *inter alia*, a rotary fluid machine having the first rotation mechanism and the second rotation mechanism configured to rotate with a 90° phase difference from each other. Applicant respectfully asserts that this arrangement is *not*

disclosed or suggested by the Johnson patent, the Nash patent, the Sugimoto patent, the Ni publication, and/or the Kamizawa publication, whether taken singularly or in combination.

Specifically, the Johnson patent discloses two pistons 10 and 10^x and these pistons are arranged in 180° phase difference from each other, as explained above. The Nash patent, the Sugimoto patent, the Ni publication, and the Kamizawa publication do not account for the deficiencies of the Johnson patent with respect to independent claim 1. More specifically, none, of these references disclose or suggest a rotary fluid machine having the first rotation mechanism and the second rotation mechanism configured to rotate with a 90° phase difference from each other, as now set forth in independent claim 1. Since none of the cited references disclose or suggest this unique arrangement, any hypothetical combination of these cited references cannot disclose or suggest the unique arrangement of independent claim 1, as now amended.

Claims 5-8 and 10 depend from independent claim 1. Thus, Applicant believes that dependent claims 5-8 and 10 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above with respect to independent claim 1. Also, dependent claims 5-8 and 10 are further allowable because they include additional limitations, which in combination with the features set forth in independent claim 1, are not disclosed in the prior art. Accordingly, withdrawal of these rejections of dependent claims 5-8 and 10 is respectfully requested.

It is well settled in U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." Id. at 1741. The current record lacks any apparent reason, suggestion or expectation of success for combining the patents to create the Applicant's unique arrangement of the rotary fluid machine set forth in independent claim 1.

Prior Art Citation

In the Office Action, additional prior art references were made of record. Applicant believes that these references do not render the claimed invention obvious.

New Claims

Applicant has added new claims 11-17 by the current Amendment. Claim 11 is an independent claim. Claim 11 is similar to previously presented claims 1 and 6, but requires, *inter alia*, “a compliance mechanism that is configured to secure the second housing on the casing, mount the first housing movable with respect to an axial direction of the drive shaft, and adjust a position of the co-operating parts by operating a high pressure fluid on a back surface of the movable first housing.” Applicant respectfully asserts that this structure is *not* disclosed or suggested by any other prior art of record. Specifically, Applicant asserts that the Ni publication merely discloses an axial-direction compliance mechanism and fails to disclose or suggest housings as recited in independent claim 11. And the compliance mechanism of the Ni publication is just for moving the endplate 61, which corresponds to the partition plate 2c of the present application, and thus, cannot meet the limitations of new independent claim 11.

Claims 12-17 are dependent claims. New dependent claims 12-17 depend from new independent claim 11, and correspond in content to claims 2-5, 7 and 10. Claim 9 also now depends on new independent claim 11. Dependent claims 9 and 12-17 are believed to be allowable for the reasons discussed above with respect to independent claim 11. Also, dependent claims 9 and 12-17 are further allowable because they include additional limitations, which in combination with the features set forth in independent claim 11, are not disclosed in the prior art.

Appl. No. 10/571,791
Reply to Office Action of August 20, 2008
Amendment dated December 22, 2008

Conclusion

In view of the foregoing amendment and comments, Applicant respectfully asserts that claims 1-17 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. If there are any questions regarding this Amendment, please feel free to contact the undersigned.

Respectfully submitted,

/Patrick A. Hilsmier/
Patrick A. Hilsmier
Reg. No. 46,034

GLOBAL IP COUNSELORS, LLP
1233 Twentieth Street, NW, Suite 700
Washington, DC 20036
(202)-293-0444

Dated: December 22, 2008

S:\12-DEC08-YTYDK-US065035 revised Amendment.doc